

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6884

Petition of UPC Wind Management, LLC,)
pursuant to 30 V.S.A. § 248(j), for a)
certificate of public good authorizing the)
installation of three temporary wind)
measurement towers on or in the vicinity of)
Hardscrabble Mountain in Sheffield,)
Vermont; and investigation into alleged)
violation of Vermont statutes)

Order entered: 4/21/2004

I. INTRODUCTION

This case concerns a petition filed by UPC Wind Management, LLC ("UPC") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248(j) for approval of the installation of three temporary wind measurement towers on or in the vicinity of Hardscrabble Mountain in Sheffield, Vermont (the "Project"). UPC is considering constructing a wind electric generating facility on or in the vicinity of Hardscrabble Mountain. The temporary measurement towers are necessary for measuring the wind resources in this area to determine if a possible future wind generation facility is feasible.

The scope of this docket has been expanded to include an investigation into (1) whether the construction, by UPC, of a wind measurement tower on Hardscrabble Mountain, without prior approval from the Vermont Public Service Board ("Board"), violates applicable statutes, and (2) and if such a violation has occurred, a determination of appropriate remedies.¹

1. See Board Order dated October 29, 2003.

UPC served its original petition, prefiled testimony, proposed findings and a proposed order (along with a proposed CPG) on the Board, the Vermont Department of Public Service ("DPS"), and the statutory parties on August 22, 2003.

Notice of the filing in this docket was sent on September 17, 2003, to all parties specified in 30 V.S.A. § 248(j) and all other interested persons. In addition, notice was published in *The Caledonian Record* on September 19 and 26, 2003. The notice scheduled a prehearing conference for October 10, 2003, and stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before October 17, 2003.

Notices of appearance were filed by: Timothy Caffyn of UPC; Geoffrey Commons, Esq., Special Counsel, for the DPS; Steve Sease, Esq., Warren Coleman, Esq., and David Englander, Esq., attorneys for the Agency of Natural Resources ("ANR"); and Barbara Ripley, Esq., of Wilson and White, P.C., for the Kingdom Commons Group ("KCG") and for Paul and Carol Brouha.

The prehearing conference was held as scheduled on October 10, 2003. The following individuals requested party status in this docket at the prehearing conference: Paul and Carol Brouha, Alice Soininen, and Catherine Sargent. Additionally, the King George School, through Ms. Soininen, and KCG requested party status. No objections were made to the intervention requests of Paul and Carol Brouha, Alice Soininen, or the King George School. Consequently, they were granted party status at the prehearing conference. UPC objected to the party status request of Ms. Sargent and KCG. In light of the objection, Ms. Sargent and the KCG were given until October 24, 2003, to file a written motion to intervene, with comments from other parties due by October 31, 2003.

A motion to intervene was filed by KCG on October 24, 2003. Objections to this motion were received from the DPS on October 31, 2003, and from UPC on November 4, 2003. KCG filed a response to these objections on November 13, 2003. Because I find below that the petition does not raise a significant issue with respect to the substantive criteria of Section 248(b), and because, if the Board accepts this proposal for decision, there will be no further hearings on the merits, there is no need, at this time, to rule on KCG's motion to intervene on the

merits of this case. Notwithstanding this ruling, KCG has made a sufficient showing to be granted permissive intervention on issues related to the investigation into UPC's installation of a wind measurement tower without state approval.

A site visit was held on November 5, 2003. Because inclement weather that day made long distance views of the tower locations impossible, the Hearing Officer returned to the area on November 10, 2003, to view the existing and proposed tower locations from areas suggested by the parties.

Specific written comments about whether the petition raises a significant issue under any of the substantive criteria of Section 248 were received from the DPS (which incorporated the concerns of ANR), Paul and Carol Brouha, and KCG.

The DPS suggested in its comments that the petition raises significant issues with respect to 30 V.S.A. § 248(b)(5), but more specifically the criteria related to 10 V.S.A §§ 6086(a)(1)(E) (streams), (a)(4) (soil erosion), and (a)(8) (scenic or natural beauty). Specifically, the DPS suggested that the construction of these towers on previously undeveloped ridgelines would necessitate clearing new roads or trails of some length, two streams may be affected by road crossings necessary for access to the tower locations, and road construction may cause soil erosion. The DPS also expressed concerns about post-construction and post-removal restoration of the road and trails used for access, as well as the effects of providing vehicular access to the ridgelines. Finally, the DPS suggests that if the Board approves these towers without further hearings that the following conditions should be included:

- (1) place a time limit on the CPG, and require removal of the towers and restoration of disturbed areas;
- (2) require the UPC to minimize clearing, and to consult with a professional forester regarding clearing of tower sites and access routes;
- (3) prohibit the use of herbicides; and
- (4) prohibit lighting of the towers absent further approval from the Board.

Paul and Carol Brouha commented that they believe that UPC's petition raises significant issues under 30 V.S.A. § 248(b)(1) (orderly development of the region), (2) (need),

(4) (economic benefit), (5) (environmental issues), and (6) (least-cost integrated planning). Specifically, the Brouhas argue that the wind measurement towers are a micro-siting precursor to construction of a wind farm on Hardscrabble Mountain and adjacent ridges, and, therefore, will have significant impacts under these criteria.

KCG also argues that the proposed project raises substantive issues under 30 V.S.A. § 248(b)(1) (orderly development of the region), (2) (need), (3) (system stability and reliability), (4) (economic benefit), (5) (environmental issues), and (6) (least-cost integrated planning), and, therefore, a CPG should not be issued without a full hearing on the merits before the Board.

The DPS filed a determination under 30 V.S.A. § 202(f) on December 19, 2003.

Pursuant to 30 V.S.A. § 8, and based on the evidence in the petition and the accompanying documents, the information observed at the site visits, and the filings of the parties, I propose the following findings and conclusions to the Board.

II. FINDINGS

1. UPC is a wind energy development company with main offices in Newton, Massachusetts, and a satellite office in Lyndon, Vermont, whose principals have developed, built, operated and managed over 480 MW of wind power over the last five years. Pet. at 1.

2. UPC proposes to construct three wind measurement towers in Sheffield, Vermont. Two are proposed for Hardscrabble Mountain, and one will be located farther to the north on an unnamed ridge between Norris and Granby Mountains. UPC plans to measure the wind resource at these sites for up to five years and then remove the towers. Caffyn pf. at 2; UPC exh. A.

3. UPC has an agreement with the landowners of the property to be used for the Project that will allow the installation of the wind measurement towers. The agreement will also allow construction of a wind generation facility, should UPC determine that construction of such a facility would be economically viable in this area. Caffyn pf. at 3.

4. The towers will be made of lightweight, 8-inch diameter steel tubes up to 50 meters in height and have guy wires for stability. The towers will each rest on a small steel plate, with no foundation of any kind. The towers are to be raised using a small winch. Caffyn pf. at 2; UPC exhs. A and B.

5. The proposed towers will contain wind speed, direction and temperature sensors at one or more levels. An electronic data recorder running off battery power, with a photovoltaic panel for recharging, will be mounted at the base of each tower. Caffyn pf. at 2; UPC exh. B.

6. Each proposed tower site will require cutting or trimming of up to one-half of an acre of trees to gain access to the anchor locations during construction, and/or to allow the unobstructed passage of guy wires through the tree canopy. The towers will not have any external power supply or cables (other than the guy wires) running to them. Caffyn pf. at 3; UPC exh B.

7. The wind measurement equipment will be transported to the site using four-wheel-drive vehicles, ATVs or snowmobiles, over existing roads and trails where they exist to reduce the amount of clearing required. Where new trails must be cleared, brush and a few trees will be cut to allow for passage of these vehicles. The tops of the cut trees will be moved to the sides of the cleared area along the access and at the tower sites. Logs will be left in place for the landowner to remove if desired. Preparing access to the site, and the preparation of the site for the installation, requires no earthwork, digging, water channeling, blasting, or excavation of any kind. The soil, wet areas, and low-lying brush will be left undisturbed. Brush that will be cut will be spread out into low, thin piles. No concrete or other permanent above-ground alterations are needed for the installation of the proposed towers. Caffyn pf. at 2-3.

8. During the period of measurement station operation, wind data and meteorological data will be continuously measured and summary statistics will be recorded over 10-minute or longer periods and stored electronically in the data recorder at the base of the tower. Caffyn pf. at 3.

9. After the wind measurement period is over, the sites will be restored by lowering the tower hardware and recording equipment to the ground. The towers will then be disassembled and packed on the ATVs and transported off site. If guy anchors cannot be removed, they will be sawed off below grade. The site and access trail will be left with no man-made equipment visible. Vegetation will continue to grow and over time the site will be restored to close to its original condition. Caffyn pf. at 3.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

10. The proposed towers will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies and the land conservation measures contained in the plan of any affected municipality. This finding is supported by finding 11, below.

11. The Project plans have been reviewed by the Town of Sheffield Selectboard, which has not identified any objections to the Project as proposed. Because the towers will be temporary and will only be in place for up to five years as necessary to collect meteorological data, there will be no permanent land use changes at the site relevant to any pertinent land conservation measures. Caffyn pf. at 5; UPC exh. D.

Discussion

The Brouhas argue that the petition raises a significant issue under this criterion. Specifically, they suggest that a wind generation facility, of which the wind measurement towers are necessary precursors, would unduly interfere with the orderly development of the region. I disagree. This petition is for temporary wind measurement towers that will be in place for no more than five years. While it is true that measurement towers are necessary precursors for a wind generation facility, they are not such a facility and it is in no way certain that UPC will ever petition the Board for approval of such a facility. Furthermore, if in the future a petition for a wind generation facility at this site is filed, the facility's compliance with the criteria will be reviewed at that time. Consequently, the analysis of the current petition must be confined to the impacts of the temporary measurement towers. It is my conclusion, particularly in light of the towers' temporary status and my findings under 30 V.S.A. § 248 (b)(5) related to aesthetics as set out below, that the impacts of the towers will be minimal and they will not unduly interfere with the orderly development of the region. To ensure that the towers will only have a short-term effect on the region, I recommend that the Board include a condition that will require their removal within five years from the date of this Order.

KCG argues that the wind measurement towers will have planning implications for both the Town of Sutton, surrounding towns, and the Northeast Kingdom Development Association, and these entities need time to "weigh in after considering and understanding the full impact of this project."² Given the minimal impact of the temporary measurement towers as discussed below, KCG's concerns under this criterion seem to primarily relate to a subsequent wind generation facility. Therefore, I conclude that KCG has not raised a significant issue under this criterion.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

12. The proposed towers are necessary to accurately estimate the character of Hardscrabble Mountain and vicinity as sites for a potential wind-powered electric generation facility. Caffyn pf. at 5.

Discussion

KCG, argues that if a wind measurement tower is not actually meeting present or existing demand for service, then it should not receive an affirmative finding under this criterion; and, instead, should be considered for permitting under Act 250 (10 V.S.A. § 6001 et. seq.) KCG also argues, alternatively, that if a wind measurement tower is to be considered part of a project that will meet the demand for service in the future, then a master plan for the wind generation facility should be presented to the Board and reviewed as part of the wind measurement tower review.

These arguments are not persuasive. First, to dismiss Board review of this petition because the Project is not, by itself, required to meet the need for present and future demand for service would force developers of wind generation facilities to have to obtain approval for such facilities from their local district environmental commissions. While developers of wind generation facilities may be able to apply for Act 250 permits for wind measurement towers from their local district commissions in lieu of applying to the Board for approval under Section 248, to require them first to obtain an Act 250 permit and then later, if they determine that a wind generation facility is feasible at the site of the wind measurement tower, to apply to the Board for approval of the wind generation facility would not promote judicial efficiency or economy. This

2. KCG letter of October 22, 2003 at 2.

is particularly relevant when one or more of the measurement towers can later be included in the application to become a permanent part of the wind generation facility, which is sometimes the case. Consequently, the Board has traditionally accepted petitions for approval of wind measurement towers under Section 248 as a reasonable way to provide "one-stop shopping" for wind developers.

Second, I also reject KCG's suggestion that the Board should require the filing of a master plan for the wind generation facility with a developer's petition for approval of wind measurement facilities. This would not be a reasonable requirement because there is no certainty at the time of the petition for measurement towers that a plan will ever be developed for a generation facility. Such a requirement would be unnecessarily burdensome for the developer because at the time a wind measurement tower application is prepared, there are no specific plans for a generation facility, and any attempt to somehow begin the review of a wind generation facility for which there are no definitive plans would be extremely premature. Even attempting to determine whether a particular site is generally appropriate for a wind generation facility is not possible without some knowledge of the number and size of turbines proposed, the amount of clearing required, routes of necessary transmission facilities, and visual assessments, to name a few of the relevant considerations. To require that this information be developed at the wind assessment phase of a project is neither possible, nor reasonable.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

13. The proposed towers use batteries recharged with a photovoltaic panel and are not connected to the local electric distribution system, and, thus, will not adversely affect system stability or reliability. Caffyn pf. at 2.

Discussion

KCG argues under this criterion that wind power is at best an unreliable supplement to other power sources and, therefore, this project is not required to meet present and future demand for service. While this may be an issue in any future proceeding regarding a petition for approval of a wind generation facility, it is not relevant to this petition for approval of wind measurement towers.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

14. Knowledge of the wind resource on Hardscrabble Mountain and the surrounding ridgelines is an essential first step in the possible construction of wind generation facility, which if approved, could have economic and other benefits to the state and its ratepayers. Caffyn pf. at 5.

Discussion

The Brouhas suggest that the installation of the three wind measurement towers raises a significant issue with respect to this criterion. While they do not directly state their reasons for this assertion in their filing, they do suggest that any subsequent wind generation facility proposed in their area would not provide economic benefits to the state or its ratepayers. Based on their filing, I cannot conclude that the wind towers will raise a significant issue under this criterion. While it is true that a wind measurement tower will not, by itself, provide a significant economic benefit, it is a necessary first step to determine if it is feasible to propose a wind generation facility, which, in turn, could provide significant economic benefit.

KCG argues that the Board cannot make an affirmative finding under this criterion because wind measurement towers contribute little, if any, economic benefit to the state and its residents. In addition, a subsequent wind generation facility will have negative impacts that will off-set any benefits. Again, I disagree with these arguments, as articulated above.

**Aesthetics, Historic Sites, Air and Water Purity,
the Natural Environment and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

15. The proposed towers will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety. This finding is supported by findings 16 through 36, below, which are based on the criteria specified in 10 V.S.A. §§ 1424(d) and 6086(a)(1) through (8), (8)(A) and (9)(K).

Outstanding Resource Waters

[10 V.S.A. § 1424(a)(d)]

16. There are no watercourses in the vicinity of the proposed tower that have been designated as Outstanding Resource Waters. Caffyn pf. at 5.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

17. The proposed tower will not produce any emissions or waste and thus will not result in undue water and air pollution. This finding is supported by the specific findings under the criteria of 10 V.S.A. §§ 6086(a)(1)(A) through (G), below.

Headwaters

[10V.S.A. § 6086(a)(1)(A)]

18. Although the proposed towers are located in a headwaters area because they will be above 1500 feet, there are no streams in the vicinity of the sites, there will be minimal, if any, earth disturbance required, and there will be no reduction in the quality of the ground and surface waters flowing through or upon the affected lands. Thus, the proposed towers will not have an undue adverse impact on any headwaters. Caffyn pf. at 4-5.

19. The access road crosses significant streams in two locations. However, the road has adequate culverts in these locations, and no improvements to this road are necessary for the limited amount of traffic that will be generated for access to the site. 1/05/03 site visit.

Discussion

The DPS suggested that the Project may raise a significant issue related to access road crossings of two streams that are necessary to reach the northern-most tower site. However, as set forth in finding 19, above, the first site visit confirmed that the access road does not, and will not, affect the stream.

KCG argued that the use of access roads to and the clearing of tower sites may have significant impacts on water quality. Based on findings 19, above, and 27, below, the use of access roads and trails and the clearing of the tower sites will not have a significant impact related to water quality. Therefore, the proposed project does not raise a significant issue related to headwaters or streams.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

20. Because the proposed towers will not produce any emissions or waste, the proposed towers will meet all applicable health and Environmental Conservation Department regulations for disposal of wastes, and will not involve the injection of waste materials or any harmful or toxic substances into ground water or wells. The DPS has recommended, and the Board should include, the following condition in the CPG to protect groundwater: "UPC shall not use herbicides in connection with the approved project." Caffyn pf. at 4-5.; DPS comment letter dated October 22, 2003.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

21. The proposed towers will not utilize water during or after construction, and, accordingly, the criterion specified in 10 V.S.A. § 6086(a)(1)(C) relating to water conservation is inapplicable. Caffyn pf. at 4-5.

Floodways, Streams, and Shorelines

[10 V.S.A. §§ 6086(a)(1)(D)(E) & (F)]

22. The proposed towers will not be located on a floodway. Caffyn pf. at 4-5.

23. There are no streams near the proposed towers. Caffyn pf. at 4-5; *see* also, findings and discussion above regarding Headwaters.

24. The proposed towers will not be located near any shorelines. Caffyn pf. at 4-5.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

25. Based on their location on the top of ridge lines, the proposed towers will not result in an undue adverse impact on wetlands. Caffyn pf. at 4-5.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

26. The proposed towers will not use any water and will not place a burden on any existing water supply. Caffyn pf. at 4-5.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

27. The proposed towers will not result in unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition could be created. The only soil disturbance will be related to the insertion of guy wire anchors. Caffyn pf at 4-5; finding 19, above,

Discussion

The DPS in its comments suggested that the Project may raise a significant issue with respect to this criterion. Based on the Petition, and as confirmed by the site visit, little if any soil disturbance will be required for the installation of these towers. The access roads, for the most part, exist and are in adequate condition to provide the temporary access for installation of the towers and for subsequent maintenance access. The small amount of additional clearing needed for access to two of the tower sites is minimal and will not require earth disturbance. Consequently, I conclude that this Project does not raise a significant issue under this criterion.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

28. Because of their location, the proposed towers will not cause unreasonable congestion or unsafe conditions with respect to the use of highways, waterways, railways, airports and airways and other means of transportation existing or proposed. Caffyn pf . at 4.

29. An existing private road provides access to the Hardscrabble Mountain sites, with the exception of a few feet of clearing that will be necessary for a trail to the southern-most tower location. With the exception of about the last 1000 feet, access to the northern site will be via existing town and private roads, as well as logging trails. Where roads or trails do not exist, UPC will “brush-in” the final route to the site, and it will use four-wheel-drive vehicles, all terrain vehicles, or snowmobiles. Caffyn pf. at 2.

Educational Services

[10 V.S.A. § 6086(a)(6)]

30. The proposed tower is unrelated to and will not cause any burden on the ability of any municipality to provide educational services. Caffyn pf. at 5.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

31. The proposed tower will not require any governmental services. Caffyn pf. at 5.

**Aesthetics, Historic Sites
and Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

32. The proposed tower will not have an undue adverse effect on the scenic or natural beauty of the area, esthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 33 and 34, below.

33. The proposed towers will only be visible above the existing tree canopy from off-site locations. The weathered galvanized tubing and gray guy wire to be used in these installations usually blend well with either blue or cloudy sky backgrounds, and are difficult to see at distances of greater than one mile away. The visibility of the towers will depend on how far the viewer is from them, atmospheric conditions, and the presence of any intervening terrain, buildings or vegetation. Generally, they are difficult to see relative to other communication towers because of the slender (8") profile and neutral coloring. Caffyn pf. at 5; UPC exh. C.

34. The towers will be generally visible with the naked eye if there is a clear line-of-sight from within one mile. At two miles, for the towers to be visible, lighting conditions have to be such that the towers are highlighted against a contrasting background, such as in the early morning or on sunny, clear days. At three miles, the towers are usually not noticeable unless one is specifically looking for them. Caffyn pf. at 5.

Discussion

Based on the above findings and my observations at the site visits, I find that the Project's impact will not be "adverse" under this criterion, and that thus the Project does not raise a significant issue with respect to the aesthetics or scenic or natural beauty of the area. In reaching this conclusion, I have relied on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called Quechee Lakes decision. *Quechee Lakes Corporation*, #3W04 1 1-EB and 3W0439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the project will be adverse. The project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it is located. If it is found that the impact would be adverse, it is then necessary to determine that such an impact would be "undue." Such a finding would be required if the project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps will not be taken to improve the harmony of the project with its surroundings. The Board's assessment of whether a particular project will have an "undue" adverse effect based on these three standards will be significantly informed by the overall societal benefits of the project.³

Given the facts of this case, I cannot find that the proposed towers would have an adverse effect on the aesthetics of the area because the towers are very thin, they will be difficult to see from more than a mile away, the amount of clearing necessary for their installation will be minimal, any clearing should not be visible from off-site, and they will be in-place for a limited, defined, period. To insure that clearing is minimal, I propose that the Board adopt the DPS's recommendation that a condition should be included in the CPG that states: "UPC shall minimize clearing and consult with a professional forester regarding clearing of tower sites and access routes."

It is not clear from the petition whether the tower will be lighted, but my understanding is that the Federal Aviation Administration does not generally require lights on towers that are less than 200 feet in height. Any possibility that there may be lighting should be dealt with by including in the CPG the condition suggested by the DPS to prohibit the installation of any lighting absent further approval by the Board.

Because I have found that the impact of the project under the "Quechee Analysis" will not be adverse, there is no need to discuss the additional steps of that analysis.

3. Consider, for example, reduction in need for power plant or transmission investments, or other social costs.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

35. The proposed tower will not have any undue adverse effect on wildlife habitat or have any impact on threatened or endangered species, including any bird species. UPC's extensive experience indicates that it is rare to find any bird mortality at wind measurement towers. Caffyn pf. at 4.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

36. The proposed towers will not unnecessarily or unreasonably endanger the public or quasi-public investment in any public facilities, services or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, the public's use or enjoyment of or access to any such facility, service, or lands. Caffyn pf. at 4.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

37. UPC is not required to have a least-cost integrated plan pursuant to 30 V.S.A. § 218c.

Discussion

KCG argues that this criterion may be applicable to UPC or to a company to which UPC intends to sell power. Since this criterion is only applicable to regulated electric companies and UPC is not such a company, I have found that this criterion is not applicable to UPC.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

38. The proposed towers are consistent with the Vermont Twenty-Year Electric Plan, in accordance with 30 V.S.A. § 202(f). DPS letter dated December 19, 2003.

Outstanding Water Resources

[30 V.S.A. § 248(b)(8)]

39. The proposed towers will not affect any waters of the state that might be designated as Outstanding Resource Waters. *See* Finding 16, above.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

40. The proposed towers will not be served by existing or planned transmission facilities and, accordingly, will not have an undue adverse effect on Vermont utilities or customers. Caffyn pf. at 5.

Executive Order # 52 – Agricultural Land

41. Based on their location, the proposed towers will have no effect on any prime agricultural soils. Caffyn pf. at 4.

**Investigation of Alleged Violation
and Possible Remedies**

As outlined above, this docket was expanded by the Board to investigate whether the construction, by UPC, of a wind measurement tower on Hardscrabble Mountain, without prior approval from the Board, violates applicable statutes, and if such a violation has occurred, a determination of appropriate remedies that should be required by the Board. UPC acknowledges that it installed one wind measurement tower earlier this year without approval from either the Board pursuant to Section 248 or from the District Environmental Commission pursuant to Act 250. Tr. at 48.

In order to determine how best to proceed with this investigation, parties should file recommendations for appropriate proceedings regarding this matter, on the same date that comments are due on this Proposal for Decision.

III. CONCLUSION

Based upon all of the above evidence, I conclude that the proposed construction will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

A Proposal for Decision pursuant to 3 V.S.A. § 811 has been served upon the parties to this case.

Dated at Montpelier, Vermont, this 22nd day of January, 2004.

s/Peter B. Meyer
Peter B. Meyer
Hearing Officer

IV. BOARD DISCUSSION

_____ On January 12, 2004, Paul and Carol Brouha and the Kingdom Commons Group ("KCG") jointly filed comments opposing the Proposal for Decision ("PFD") and requesting oral argument. Oral argument was held on March 11, 2004.

The Brouhas and KCG raised three primary issues through their comments and during oral argument. First, the Brouhas and KCG contend that wind measurement towers, by themselves, do not fall under Board jurisdiction pursuant to 30 V.S.A. § 248, but rather under the jurisdiction of the Environmental Board pursuant to 10 V.S.A. § 6001 *et seq* (commonly referred to as Act 250). Second, the Brouhas and KCG argue that, if the Board does have jurisdiction over the anemometers, the Board should impose upon the petitioner the requirement that the petitioner perform studies on the environmental impacts of the potential wind project, which is the anticipated end result of the anemometers. Third, the Brouhas and KCG question the Hearing Officer's statement that the Quechee analysis should include an examination of the societal benefits of the proposed project to determine whether the impact of the proposed project is undue. The Brouhas and KCG also raised several other issues that will be addressed below.

The Brouhas and KCG contend that anemometers are not facilities as defined in 30 V.S.A. § 248, but rather should be permitted pursuant to Act 250. Section 248 provides that "no company . . . may begin site preparation for or construction of an electric generation facility or electric transmission facility within the state which is designed for immediate or eventual operation at any voltage [without first obtaining a certificate of public good from the Board]." The Vermont legislature has specifically exempted from Act 250 any "electric generation or transmission facility which requires a certificate of public good under section 248 of Title 30"4

_____ Shortly after both Section 248 and Act 250 were enacted, the Vermont Attorney General's Office issued an advisory opinion. The Attorney General concluded:

where a proposed improvement bears a reasonable relationship and can be considered to be part of an electric transmission or generation facility, having in

4. 10 V.S.A. § 6001(3).

mind the broad meaning to be ascribed to the word 'facility,' it is my opinion the exemption applies and no Act 250 permit can be required prior to construction.⁵

The Attorney General's opinion provides some examples of the broad meaning of "facility"; specifically, the opinion states that "a separate Act No. 250 permit is not required for the construction of impoundments, roads, rail spurs and lagoons in connection with electric generation and transmission facilities."⁶ The opinion states that the substantial overlap between Act 250 review and the Board's analysis under Section 248 demonstrates that the Vermont General Assembly was seeking to avoid duplication of effort by exempting transmission and generation facilities from Act 250 review.⁷

The Environmental Board, in declaratory rulings, has established a different standard for determining when a facility is subject to its review. The Environmental Board has stated that Section 248 applies when a project is "directly related to the construction and operation of the [generating] facility."⁸

The Environmental Board did not provide any rationale to support the "directly related" standard it sets forth, while the Attorney General's opinion provides a detailed analysis supporting its "reasonably related" standard. For this reason, and because of our own examination of the current law, we find the Attorney General's opinion to be more persuasive. However, the Board's jurisdiction over wind measurement towers, as a precursor to a wind generation project, satisfies both standards, as we explain below.

UPC has explained that the anemometers are needed to determine the economic feasibility of constructing a wind generating facility atop Hardscrabble Mountain, and if the project is

5. Op. Vt. Att'y Gen., No. 715 (Aug. 5, 1971) at 172.

6. *Id.*, at 171.

7. The Brouhas and KCG contend that the anemometers "presence is simply a land use issue and should be reviewed under Act 250." Brouhas and KCG's comments on the PFD, at 2. This argument ignores the fact that Section 248, by incorporating by reference many of the Act 250 criteria, serves the same function as a land use statute.

8. *In re Burlington Electric Department* (D.R. # 119, October 8, 1980). *See also, Town of Springfield Hydroelectric Project* (D.R. #111, January 19, 1981). We note that, although the *Town of Springfield* ruling cites to the Attorney General Opinion, no mention was made of the "reasonably related" standard set forth in that opinion.

feasible, the appropriate placement of individual turbines.⁹ Additionally, the only existing wind project in Vermont, at Searsburg, incorporates an existing wind measurement tower into the final project.¹⁰ Consequently, we conclude that UPC's proposed wind measurement towers, in preparation for a potential wind generating project on Hardscrabble Mountain, are not only reasonably related, but directly related, to a generating facility.

The Board has substantial discretion over the order of its business.¹¹ The UPC petition for construction of anemometers, and any similar petitions, is a preliminary step in the petition for a wind generating facility. The anemometers that we are authorizing today will provide the information for UPC to determine the size, scope, and specific placement of any wind project that it may propose on Hardscrabble Mountain. We will then review UPC's proposal, if one should materialize, under the Section 248 criteria to determine whether a wind generation facility, in the size, scope, and specific placement proposed by UPC, will satisfy the public good.¹²

The Brouhas and KCG assert that, if the measurement towers are a precursor to a potential wind farm, the Board should require UPC to conduct environmental studies of the impact of the future wind project. To bolster this argument, the Brouhas and KCG point to the PFD's treatment of the economic benefit criterion where the Hearing Officer states that the anemometers are "a necessary first step to determine if it is feasible to propose a wind generation facility, which, in turn, could provide significant economic benefit."¹³ Recognizing that the wind measurement towers are a precursor to a wind generation facility, it is appropriate to consider the potential benefits of that possible wind project. By the same token, the Board should also consider the potential impacts of the possible wind project. Thus, it is appropriate to require

9. Caffyn pf. at 2; tr. 3/11/04 at 30 (Caffyn).

10. Docket 5823, Order of 5/16/96 at 7.

11. See *In re Petition of Green Mountain Power Corporation*, 147 Vt. 509, 515-519; Docket 6983, Order of 2/27/98 at 13-14.

12. We strongly reject the claim by the Brouhas and KCG that the Board is biased toward wind projects (See Brouhas and KCG's response to PFD, at 2; and the Brouhas and KCG's statement that the Board would "move [a wind generating] project through the permitting process without paying adequate attention to other issues that could take time and extended studies to adequately understand." Brouhas and KCG's response to PFD, at 3.

13. PFD at 9 (emphasis in the original).

UPC to address those impacts, to the extent feasible and reasonable at this preliminary stage of UPC's planning of a possible wind generation facility on Hardscrabble Mountain.

Absent a petition for a clearly defined wind project, we find it difficult to conceive of specific studies that should be conducted *at this time*. However, as these anemometers are a precursor to a potential wind project, we will require the Petitioner to confer with ANR and the Department, as statutory parties in Section 248 proceedings, to determine what studies should be conducted prior to the filing of a petition for approval to construct a wind generation project at the site. In the event that UPC files a petition for Board approval of a wind project at the current site, such petition shall include an averment by UPC that it has worked in good faith with ANR and the Department to address these entities' need for information prior to review of a proposal for a wind project.

The next issue that we turn to is the Hearing Officer's interpretation of the Quechee analysis. The Hearing Officer states that "the Board's assessment of whether a particular project will have an 'undue' adverse effect based on these three standards [the Quechee analysis standards for determining whether an impact is undue] will be significantly informed by the overall societal benefits of the project." This language has been used in prior Board Orders and, in Docket 6793, the Department voiced similar opposition to this language. In response to the Department's comments, we stated:

We have included similar language in many previous decisions related to the assessment of the environmental impacts of projects under criterion 5 of 30 V.S.A. § 248(b). This assessment is one that the Board has long used in balancing the costs and benefits of proposed electric utility infrastructure improvements. This concept was articulated by the Board as early as 1986 when the Board explained that projects with adverse environmental effects may still be approved under Section 248 if they are shown to be necessary for the public good. The concept expressed by the sentence and footnote objected to by the DPS is a straightforward application of this general principle.¹⁴

UPC's comments on this issue have technical merit, but address a distinction without a difference. Under Section 248(b)(5), the Board is required to determine whether the proposed facility will "have an undue adverse effect on esthetics, historic sites, air and water purity, the

14. Docket 6793, Order of 5/5/03 at 17 (citations omitted).

natural environment and the public health and safety," with the Board giving "due consideration" to certain specified Act 250 criteria, including Act 250's aesthetic criterion. This Board is thus charged with giving due consideration to the Act 250 aesthetic criterion in order to inform our determination of whether a proposed generation or transmission facility will have an undue adverse effect on aesthetics. Consistent with that statutory mandate, it has been our longstanding and consistent practice to apply the Quechee analysis of Act 250, and also recognize a project's overall societal benefits in order to determine whether a project has an undue adverse effect on aesthetics. As an organizational matter, we could either (1) consider the project's overall societal benefits in the course of applying the Quechee test, as we have regularly done, or (2) conduct the Quechee analysis without regard to the project's benefits and then give the Quechee results "due consideration" along with the project's benefits, in determining whether there is an undue adverse impact under Section 248(b)(5). The distinction between these two orders of consideration is the difference that the Brouhas and KCG correctly note. However the order in which these factors are considered, either way, the project's benefits are relevant in determining whether there is an undue adverse impact.

Having addressed the three primary arguments raised by the Brouhas and KCG, we now turn to the other issues raised in the response to the PFD and during oral argument.

The Brouhas and KCG request that the Board join the landowners, upon whose properties the anemometers will be constructed, as necessary parties. The Brouhas and KCG contend that this is necessary due to UPC's alleged "lack of permanent ties" to Vermont, and the need for a party responsible for repair and restoration of the site. In a response to the Brouhas and KCG's comments, UPC has disputed this alleged lack of connection to Vermont, and at oral argument, contended that the value of the anemometers would strongly discourage UPC from leaving the equipment in place after its current purpose were served. We decline to join the landowners, for several reasons. First, the Brouhas and KCG fail to identify any statute, rule, or case law to support their claim that the landowners are necessary parties. Nor do they identify any legal foundations for their assertion that proof of "permanent ties" to Vermont is vital to granting a petition (an argument that we would not accept lightly without close consideration of the federal constitutional commerce-clause issues that it would present). Second, the Brouhas and KCG

have failed to provide a sufficient demonstration that joinder of the landowners is needed to ensure repair and restoration of the site. Third, the Brouhas and KCG did not raise this issue in a timely manner. This issue should have been raised prior to the parties' comments on the Hearing Officer's PFD.

We now address UPC's alleged violation of Section 248 through the construction of a wind measurement tower on Hardscrabble Mountain without Board approval.¹⁵ UPC and the Department filed a Settlement Agreement on this issue on December 23, 2003. The Agreement provides, without determining that UPC has violated Section 248, for the payment of \$2,000 to the State of Vermont by UPC, pursuant to 30 V.S.A. § 30. The Brouhas and KCG argue that the Board should reject the Settlement Agreement and instead find that a violation did occur and is continuing to occur. Furthermore, the Brouhas and KCG contend that UPC should be required to post a bond to ensure removal of the anemometer.

It is undisputed that UPC constructed a wind measurement tower prior to receiving a certificate of public good from the Board. We find the Settlement Agreement with UPC's payment of \$2,000, pursuant to Section 30, to be an appropriate resolution of this issue.

The final point, and one not raised by the parties, is to clarify a statement by the Hearing Officer. The Hearing Officer proposes that the anemometers be allowed to remain on Hardscrabble Mountain for a five-year period. We clarify that the five-year period is from the date of this Order.

V. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that the installation of three temporary wind measurement towers on or in the vicinity of Hardscrabble Mountain in Sheffield, Vermont, for up to a five-year period from the date of this Order, in accordance with the evidence and plans presented in this proceeding and the following conditions, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good shall be issued in the matter.

15. The Board has read the record on this issue, and thus we resolve this issue directly ourselves, rather than have the Hearing Officer prepare a proposal for decision on the issue. *See* 3 V.S.A. § 811.

1. UPC shall remove the towers and restore any disturbed areas within five years from the date of this Order.
2. UPC shall minimize clearing, and consult with a professional forester regarding clearing of tower sites and access routes.
3. UPC shall not use any herbicides at any time or for any purpose in association with this Project.
4. Lighting of the towers is prohibited, absent further approval from the Board.
5. UPC shall confer with the Vermont Agency of Natural Resources and the Vermont Department of Public Service to determine what studies should be conducted prior to the filing of a petition for approval to construct a wind generation project at the site. In the event that UPC files a petition for Board approval of a wind project at the current site, such petition shall include an averment by UPC that it has worked in good faith with ANR and the Department to address these entities' need for information prior to review of a proposal for a wind project.
6. The payment of \$2,000 by UPC to the State of Vermont, pursuant to 30 V.S.A. § 30, appropriately resolves the issue of any alleged violation of 30 V.S.A. § 248 that might have occurred due to UPC's failure to obtain a certificate of public good prior to construction of an anemometer.

Dated at Montpelier, Vermont this 21st day of April, 2004.

<u>s/Michael H. Dworkin</u>)	
)	PUBLIC SERVICE
)	
<u>s/David C. Coen</u>)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

Filed: April 21, 2004

Attest: s/Judith C. Whitney
Deputy Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.